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REMARKS

An Official Action mailed November 26, 2002 noted Applicant's election with traverse of claims 1-6, a series of claims directed to a domed packing material. A new claim 29 previously submitted by Applicant was also deemed by the Examiner to fit within the scope of the elected claims. However, the prior requirement to restrict was made final. The non-elected claims are apparently method claims.

The above Official Action rejected claims 1, 5 and 6 under 35 USC 102(b), citing U.S. Patent 3,895,456 (Fabre). Also, claims 1, 5, and 29 were rejected under 35 USC 102(b), citing U.S. Patent 4,518,643 (Francis). Claims 1, 5, 6 and 29 were rejected under 35 USC 102(b), citing U.S. Patent 5,447,772 (Flieger) and U.S. Patent 3,857,144 (Bustin). Claims 2-4 were rejected under 35 USC 103(a), citing Fabre, Francis, Flieger, Bustin, and U.S. Patent 5,124,191 (Seksaria).

After this Office Action was mailed, a request to withdraw by Applicant's former counsel was approved March 27, 2003.

Applicant, acting pro se, sent communications to the Examiner dated May 15, 2003 and May 23, 2003 together with a Credit Card Payment Form in the amount of \$985.00 as an extension fee for filing a late response.

In an Office Action mailed August 21, 2003, the Examiner found Applicant's prior communications non-responsive because Applicant was attempting to replace the pending product claims with non-elected method claims. Applicant was given one month to respond.

In a response sent by facsimile on September 8, 2003, the Applicant provided replacement claims directed to a product. In an Office Action mailed September 17, 2003, the Examiner found Applicant's last communication non-responsive for failure to discuss how the claims distinguished over the references cited in the Office Action dated November 26, 2002. The Examiner found Applicant's last communication a bona fide attempt to respond and gave Applicant one month to provide a proper response.

On behalf of Applicant, I would like to express his appreciation for the courtesies extended by the Examiner during this period when he represented himself pro se.

PRESENT DISCLOSURE

The disclosed packing material is so different from any packing material in the prior art as to be *sui generis*. No one has ever before thought of nesting layers with multiple domes and later separating them to form a packing material of greater volume. A great advantage is achieved in that the packing material, before separation, can be stored without taking up much space. This eliminates the burdensome space requirements associated with bubble wrap and the like.

Developing this layered material was not simple. The inventor determined that the nested domes ought to be placed together with substantially no gap. Also, the individual layers ought to be readily separable. An example of a dome having these qualities is shown in Figures 2 and 3 of the present application. These Figures show domes nested together without any substantial gap. Also, the side of the dome shown in Figure 2 is marked to indicate a converging angle θ so that the dome diverges from the top to the base. Consequently, the layers of packing material take up very little volume, can be formed without tearing or breaking, and can still be easily separated.

Many other creative innovations are disclosed in the present application. The inventor has taught how to vary the layout pattern of the domes so that after separation renesting is unlikely. Figure 1 shows the concept of employing domes of different sizes and orientations (up and down; large and small). Figures 13-15 show how more complex layout patterns can be employed. For example, domes can be arranged in rows where some adjacent rows are staggered diagonally but others are not. Also, the sequence of up and down domes can be changed from row to row, for example, by shifting an already complex sequence by one position. Furthermore, the embodiment of Figures 4-7 shows how the packing material can be formed from a single folded sheet.

FABRE

The illustrated toy has a number of members 2 that are concave on one side and convex on the other. The members 2 are identical and therefore cannot nest together without a gap. Please refer to Figures 12A and 12B of the present application for a pictorial description of why this is so.

FLIEGER

In Flieger two sheets are fused together to close a bag or the like. This welded seal includes interconnected male and female members. The two welded sheet can be separated, but this requires rupturing the welded bonds between certain layers. One can therefore expect that the user must apply a relatively high magnitude of force to rupture these welded bonds. Flieger says that after the welded bond between the two layers is ruptured, the layers can be snapped together to act as part of a resealable bag and the like.

The layers are welded together using a die or vacuum process to form welded male

and female members. These welded members are shown as rectangular prisms with parallel vertical sides, although the specification says they can also be "cylindrical, square, rectangular, "Star" shaped or the like." Column 2 lines 21-22. The size of these interconnecting members is not described.

Flieger makes an effort to describe how pulling apart the male and female members should intentionally be made difficult. In fact, the Flieger specification says that a female die that is wider at the bottom can produce a protrusion that is wider at its tip than at the base to lock together the male and female members. See column 2, lines 26-29. Also, the specification suggests canting the protrusions so they lock together. See column 2, lines 6-14. The specification also says that distortions produced when attempting to separate the layers will lock the interconnecting members together more tightly. See column 4, lines 33-38.

Thus, Flieger is at odds with the present design where the adjacent layers must easily separate. Moreover, Flieger's interconnecting members are illustrated in Figure 1 and 2 with zero drafts and, according to Flieger's specification, preferably have a negative draft. By negative draft, Applicant means that when moving in a direction from top to bottom, the sides of Flieger's protrusions converge, not diverge. A positive draft would mean the reverse, that is, when moving in a direction from top to bottom the sides of the protrusions diverge. With even a zero draft, Flieger's sheet will be difficult to separate. Moreover, as disclosed in the present specification, one must control this angle to control stretching so domes can be formed without running the risk of breaking or tearing. See Figure 2 and the paragraphs starting on page 6, line 27; page 7, line 7; and page 9, line 5 and line 21.

FRANCIS

An embossed film can be used for preventing slipping between layers in a diaper. The embossed features are very small truncated cones, that are 10-20 mils tall and spaced with a linear density of about 200 per inch. Moreover, these truncated cones are identical in each sheet and therefore cannot nest together without a gap.

These truncated cones are in the nature of a surface finish and provide no bulk or volume. Thus, this thin material would have no ability to act as a packing material, outside of being crumpled like newspaper.

To avoid possible confusion, the Examiner should note that in Figure 2 the truncated cones are not fitting inside other truncated cones. Instead, the truncated cones of different sheets are facing each other and cones from one sheet are inserted in the spaces between cones on the opposite sheet.

BUSTIN

The illustrated sandwich bags can be formed by a tubular extrusion and then flattened and embossed by rollers 25 and 26 to form the truncated pyramidal shape shown in Figure 2a. This film is described as being no more than 0.025 mm thick. Also, the truncated pyramids are only approximately 0.5 mm deep. Column 2, lines 16-18. Therefore, the truncated pyramids are in the nature of a surface finish and provide no bulk or volume. Thus, this material would have no ability to act as a packing material.

SEKSARIA

This structural support for automobile panels has a number of irregular cup-shaped depressions. This reference has no disclosure of nesting and is therefore irrelevant.

CLAIM ANALYSIS

It is important to recognize that the cited art is non-analogous. The Examiner cites prior art involving automobile panels (Seksaria), plastic sheets for diapers (Francis), toys (Fabre), and bags (Bustin and Flieger). Some of the cited art involves flimsy paper-like materials that can have no possible relation to the present invention.

At this point, given the changing of counsel and the period where the inventor represented himself pro se, there has been some confusion regarding defining the present invention. Accordingly, a new set of claims is submitted above. Claim 30 provides in pertinent part:

... [the] adjacently nesting ones of said plurality of domes being sized differently to allow nesting substantially without any space between adjacently nesting ones of said plurality of domes, said plurality of domes each being at least 1/8 inch high, said plurality of domes each having a top, a base and a side extending from the top to the base at a diverging angle

For support of differently sized domes, a height requirement, and a side angle, see page 7, line 27 through page 7, line 27 of the original specification, as well as Figures 2 and 3.

Seksaria shows a structural automotive panel but has no disclosure of nesting and is therefore irrelevant.

Bustin's sandwich bags and Francis' diaper sheets have identically sized truncated pyramids or cones that cannot nest together without gaps. Moreover, these thin sheets could never act as a packing material, outside of being crumpled like newspaper. Thus, Bustin and Francis do not suggest domes that are "sized differently to allow nesting substantially without any space" or domes that are "at least 1/8 inch high," as provided in new claim 30.

Fabre's toy has identical interlocking cylinders that can never nest together without

gaps. Thus, Fabre does not suggest domes that are "sized differently to allow nesting substantially without any space," as provided in new claim 1.

Flieger's bag is fused or welded closed with a number of rectangular protrusions whose dimensions are never given. Thus, Flieger cannot suggest domes that are "at least 1/8 inch high," as provided in new claim 30. It would be a stretch for the Examiner to argue that Flieger's welded seal would have the bulk needed for a packing material. The most reasonable conclusion would be that there was no substantial bulk.

Moreover, Flieger's protrusions either have a zero or negative draft or are canted, expressly for the purpose of making separation difficult. In contrast, claim 30 recites "said plurality of domes each having a top, a base and a side extending from the top to the base at a diverging angle" Basically, Flieger's attempt to lock protrusions together is hostile to the present design where easy separation is desirable.

Furthermore, an invention will not be rendered obvious merely by combining teachings found in the prior art.¹ There must be some suggestion or incentive in the prior art to make the combinations.² Also, the prior art must suggest that the combination would have a reasonable likelihood of success.³ The mere fact that the prior art could be modified to form Applicant's claimed invention without the prior art

¹*ACS Hospital Systems, Inc. v. Montefiore Hospital*, 732 F.2d 1572, 1577, 21 USPQ 929, 933 (Fed. Cir. 1984)

²*Id.*

³*In re Dow Chemical Co.*, 837 F.2d 469, 473, 5 USPQ2d 1529, 1531 (Fed. Cir. 1981).

suggestion of the modification does not render Applicant's invention obvious.⁴ There is no suggestion in the cited references to combine their teachings.

Basically, the Examiner cannot convincingly argue that it would be obvious to combine the non-analogous art involving bags, diaper sheets, toys, and automotive panels. One would be truly surprised to find a suggestion in such diverse references to combine them or use them in the field of packing material. Indeed, one could hardly expect a skilled practitioner to routinely combine the technology of a sandwich bags with an automotive panel.

One could not reasonably arrive at the present invention by combining the teachings of the cited art without the present disclosure. Any argument that might use snippets of information from a plurality of such diverse references can only being guided by the teachings of the present application.

NON-ANALOGOUS ART

As previously noted, all the cited art are non-analogous. The references are not within the field of the inventor's endeavor.⁵ The test for analogous art outside an inventor's field of endeavor is whether the art pertains to the particular problem confronting the inventor.⁶ In these situations, the law presumes knowledge only of those arts reasonably pertinent to the inventor's problem.⁷ Seksaria concerns

⁴*In re Laskowski*, 871 F.2d 115, 10 USPQ2d 1397 (Fed. Cir. 1989).

⁵*In re Deminski*, 796 F.2d 436, 230 USPQ 313 (Fed. Cir. 1986).

⁶*In re Clay*, 966 F.2d 656, 659, 23 USPQ2d 1058, 1060 (Fed. Cir. 1992).

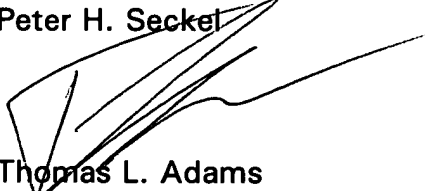
⁷*Id.*

structural components useful in, for example, an automobile. Bustin concerns sandwich bags. Francis' shows very thin sheets that might be used in diapers. Fabre discloses a toy. Flieger shows a welded seal useful in bags and other containers. The design issues addressed in these references are not reasonably pertinent to the problem addressed by Applicant's invention. A person of ordinary skill in the field of packing material would not find the references pertinent.

CONCLUSION

It is believed that the foregoing fully responds to the objections and rejections entered by the Examiner and places this application in condition for allowance, which action is respectfully requested.

Respectfully submitted,
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